



An updated checklist of blowflies (Diptera: Calliphoridae) from India

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Abstract

An updated checklist of blowflies (Diptera: Calliphoridae) is provided herewith. This has been carried due to some recent shufflings, new records, new species and erroneous placement of taxa in earlier reported lists. Now, the family Calliphoridae is represented by 9 subfamilies, 30 genera and 119 species from India.

Keywords: Blowflies, Calliphoridae, Diptera, India.

Introduction

Since Senior-White's fauna of British India and Oriental Region (Diptera: Calliphoridae, Vol-VI) nothing much has been contributed on this family from India in terms of streamlining the taxonomy of this complicated group. Isolated inputs in the form of new species/records have appeared from national and international workers from time to time, but no data in term of number of species appeared since checklists by Nandi, 2004; Bharti, 2008 and Mitra and Sinha (published online). Unfortunately, the authors of online checklist have not consulted the literature pertaining to current status of various taxa, which have undergone shuffling in recent times thus leading to errors. Moreover, data needs to be updated due to recent shufflings/publications (Bharti and Kurahashi, 2009; Rognes, 2009 and Bharti and Kurahashi, 2010) and on the basis of recommendations by Rognes, 2010 (personal communication). For instance, as per Rognes, 2009 *Bengalia emarginatoides* is a new edition to India and Srilanka and *Bengalia pallidoxa* Seguy, 1946; *Bengalia chromatella* Seguy, 1946 and *Bengalia bezzi* Senior White, 1924 as junior synonyms of *Bengalia varicolor* (Fabricius, 1805). Rognes, 2010 (personal communication) also amended the status of species belonging to genus *Bengalia* which were erected by Lehrer, 2005. These include *Bengalia krishna* Lehrer, 2005 (= *B. martinleakei*), *Bengalia evanfoneae* Lehrer, 2005 (= *B. jejuna*), *Bengalia gandhiana* Lehrer, 2005 (= *B. martinleakei*), *Bengalia indipyga* Lehrer, 2005 (= *B. kanoi*?).

In the wake of above mentioned discussion the updated list is as follows:

Family: Calliphoridae

Subfamily: Ameniinae

Tribe: Catapicephalini

Genus: *Catapicephala* Macquart, 1850

Catapicephala ingens (Walker, 1860)

Catapicephala pattoni Senior-White, Aubertin & Smart, 1940

Catapicephala micans (Fabricius, 1805)

Catapicephala splendens Macquart, 1851

Tribe: Ameniini

Genus: *Silbomyia* Macquart, 1843

Silbomyia asiatica Crosskey, 1965

Silbomyia parvula Baranov, 1938

Subfamily: Helicoboscinae

Genus: *Gulmargia* Rognes, 1992

Gulmargia angustisquama Rognes, 1993

Subfamily: Calliphorinae

Tribe: Calliphorini

Genus: *Aldrichina* Townsend, 1934

Aldrichina grahamni (Aldrich, 1930)

Genus: *Calliphora* Robineau-Desvoidy, 1830

Calliphora vicina Robineau-Desvoidy, 1830

Calliphora pattoni Aubertin, 1931

Calliphora vomitoria (Linnaeus, 1758)

Calliphora loewi Enderlein, 1903

Tribe: Phumosiini

Genus: *Phumosia* Robineau-Desvoidy, 1830

Phumosia indica (Surcouf, 1914)

Phumosia testacea (Senior-White, 1923)

Subfamily: Bengaliinae

Tribe: Bengaliini

Genus: *Bengalia* Robineau-Desvoidy, 1830

Bengalia emarginatoides Rognes, 2009

Bengalia labiata Robineau-Desvoidy, 1830

Bengalia hastativentris Senior-White, 1923

Bengalia jejuna (Fabricius, 1787) (= *B. evanfoneae*, Lehrer, 2005)

Bengalia jejuna var. *quadrinotata* (Bigot, 1887)

Bengalia lateralis Macquart, 1843

Bengalia martin-leakei Senior-White, 1930 (= *B. Krishna* Lehrer, 2005, *B. gandhiana* Lehrer, 2005)

Bengalia escheri Bezzi, 1913

Bengalia xanthopyga Senior-White, 1924

Bengalia surcoufi Senior-White, 1923

Bengalia varicolor (Fabricius, 1805) (= *B. bezzi* Senior-White, 1923, *B. pallidicoxa* Seguy, 1946, *B. chromatella* Seguy, 1946) Rognes, 2009

Bengalia torosa (Wiedemann, 1819)

Subfamily: Melanomyinae

Genus: *Melinda* Robineau-Desvoidy, 1830

Melinda abdominalis (Malloch, 1931)

Melinda bengalensis Nandi, 1994

Melinda chambensis Singh and Sidhu, 2007

Melinda chandigarhensis Singh and Sidhu, 2007

Melinda pusilla (Villeneuve, 1927) (= *Pollenia townsendi* Senior-White, Aubertin & Smart, 1940)

Melinda pusilla indica Kurahashi, 1970

Melinda scutellata (Senior-White, 1923)

Subfamily: Luciliinae

Tribe: Luciliini

Genus: *Hemipyrellia* Townsend, 1917

Hemipyrellia ligurriens (Wiedemann, 1830)

Hemipyrellia pulchra (Wiedemann, 1830)

Genus: *Hypopygiopsis* Townsend, 1916

Hypopygiopsis infumata (Bigot, 1877)

Hypopygiopsis tumrasvini Kurahashi, 1977

Genus: *Lucilia* Robineau-Desvoidy, 1830

Lucilia ampullacea Villeneuve, 1922

Lucilia bazini Seguy, 1934

Lucilia calviceps Bezzi, 1927 (New record, Bharti & Kurahashi, 2010)

Lucilia cuprina (Wiedemann, 1830)

Lucilia illustris (Meigen, 1826)

Lucilia porphyrina (Walker, 1856)

Lucilia papuensis Macquart, 1843

Lucilia sericata (Meigen, 1826)

Subfamily: Polleniinae

Tribe: Polleniini

Genus: *Pollenia* Robineau-Desvoidy, 1830

Pollenia hazarae (Senior-White, 1923)

Pollenia rudis (Fabricius, 1794)

Tribe: Melanodexiini

Genus: *Morinia* Robineau-Desvoidy, 1830

Morinia argentincta (Senior-White, 1923)

Genus: *Wilhelmia* Schmidt & Villeneuve, 1932

Wilhelmia indica Sidhu & Singh, 2005

Genus: *Polleniopsis* Townsend, 1917

Polleniopsis asiatica (Senior-White, 1923) new comb. (Kurahashi, 1972)

Polleniopsis kashmirensis Kurahashi & Okadome, 1976

Polleniopsis pilosa (Townsend, 1917)

Genus: *Tainanina* Villeneuve, 1926

Tainanina pilisquama (Senior-White, 1925)

Tainanina sarcophagoides (Malloch, 1931)

Genus: *Onesia* Robineau-Desvoidy, 1830

Onesia khasiensis (Senior-White, 1922)

Genus: *Dexopollenia* Townsend, 1917

Dexopollenia flava Aldrich, 1930

Dexopollenia testacea (Townsend, 1917)

Subfamily: Chrysomyinae

Tribe: Chrysomyini

Genus: *Chrysomya* Robineau-Desvoidy, 1830

Chrysomya albiceps (Wiedemann, 1819)

Chrysomya bezziana Villeneuve, 1914

Chrysomya defixa (Walker, 1857)

Chrysomya indica Sinha and Nandi, 2004

Chrysomya megacephala (Fabricius, 1794) (fdf/sdf, two forms in India, Bharti & Kurahashi, 2009)

Chrysomya nigripes Aubertin, 1932

Chrysomya pinguis (Walker, 1858)

Chrysomya phaonis (Seguy, 1928)

Chrysomya rufifacies (Macquart, 1843)

Chrysomya villeneuvei Patton, 1922

Subfamily: Rhiniinae

Tribe: Rhiniini

Genus: Chlororhinia Townsend, 1917

Chlororhinia exempta (Walker, 1856)

Chlororhinia tamenensis Joseph & Rao, 1972

Genus: Idiella Brauer & Berensteamn, 1889

Idiella divisa (Walker, 1861)

Idiella euidielloides Senior-White, 1923

Idiella mandarina (Wiedemann, 1830)

Idiella tripartia (Bigot, 1874)

Genus: Idiellopsis Townsend, 1917

Idiellopsis xanthogaster (Wiedemann, 1820)

Genus: Rhinia Robineau-Desvoidy, 1830

Rhinia mallochi (Senior-White, Aubertin & Smart, 1940)

Rhinia apicalis (Wiedemann, 1830)

Genus: Stomorphina Rondani, 1861

Stomorphina discolor (Fabricius, 1794)

Stomorphina lunata (Fabricius, 1805)

Stomorphina melastoma (Wiedemann, 1830)

Stomorphina procula (Walker, 1849)

Stomorphina simplex (Walker, 1857)

Stomorphina townsendi Kurahashi, 1997

Stomorphina unicolor (Macquart, 1851)

Stomorphina xanthogaster (Wiedemann, 1820)

Tribe: Cosminini

Genus: Cosmina Robineau-Desvoidy, 1830

Cosmina bicolor (Walker, 1856)

Cosmina limbipennis (Macquart, 1848)

Cosmina prasina (Brauer & Bergenstamm, 1889)

Cosmina viridis Townsend, 1917

Cosmina simplex (Walker, 1858)

Genus: Thoracites Brauer & Bergenstamm, 1891

Thoracites abdominalis (Fabricius, 1805)

Tribe: Isomyiini

Genus: Isomyia Walker, 1860

Isomyia aurifacies James, 1970

Isomyia delectans Walker, 1860

Isomyia electa Villeneuve, 1927

Isomyia fulvicornis (Bigot, 1887)

Isomyia fuscocincta Bigot, 1877

Isomyia gomezmenori (Peris, 1951)

Isomyia nebulosa (Townsend, 1917)

Isomyia nigrofasciata (Peris, 1951)

Isomyia oestracea (Seguy, 1934)

Isomyia perisi James, 1970

Isomyia phryxea Seguy, 1949

Isomyia pseudonepalana (Senior-White, Aubertin & Smart, 1940)

Isomyia pseudoviridana (Peris, 1952)

Isomyia sivah (Bigot, 1878)

Isomyia versicolor (Bigot, 1877)

Isomyia viridaurea (Wiedemann, 1819)

Isomyia zeylanica Senior-White, Aubertin & Smart, 1940

Genus: Strongyloneura Bigot, 1886

Strongyloneura nudus Ghezta and Kumar, 1991

Strongyloneura prolata (Walker, 1860)

Tribe: Rhyncomyiini

Genus: Borbororhinia Townsend, 1917

Borbororhinia bivittata (Walker, 1856)

Genus: Metallea van der Wulp, 1880

Metallea notata van der Wulp, 1880

Metallea flavibasis Senior-White, 1922

Metallea setosa (Townsend, 1917)

Genus: Rhyncomya Robineau-Desvoidy, 1830

Rhyncomya callopis Loew, 1856

Rhyncomya catalypsa Seguy, 1946

Rhyncomya divisa (Walker, 1856)

Rhyncomya flavipes Robineau-Desvoidy, 1830

Rhyncomya pollinosa (Townsend, 1917)

Rhyncomya sarotes Seguy, 1928

Rhyncomya viridaurea Wiedemann, 1824

Doubtful Species

Bengalia rivanella Lehrer, 2005

Bengalia shivanella Lehrer, 2005

To sum up, family Calliphoridae is represented by 120 species from India, out of which 22 species are endemic to this region.

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